

Sheet 1  
of 6  
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FORM PTO-1449		U.S. Dept. of Commerce Patent and Trademark Office		Atty Docket No. P1581R2	Serial No. 09/380,447
LIST OF DISCLOSURES CITED BY APPLICANT (Use several sheets if necessary)				Applicant Sidhu et al.	\$5
				Filing Date 01 Sep 1999	Group 1627

### U.S. PATENT DOCUMENTS

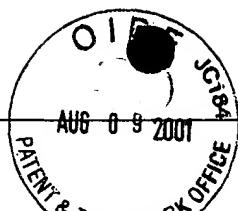
Examiner Initials	Document Number	Date	Name	Class	Subclass	Filing Date
Mor	1 4,822,740	18.04.89	Vandenbergh			
	2 4,849,355	18.07.89	Wong			
	3 4,910,140	20.03.90	Dower			
	4 4,956,288	11.09.90	Barsoum			
	5 5,098,843	24.03.92	Calvin			
	6 5,124,259	23.06.92	Tada			
	7 5,128,257	07.07.92	Baer			
	8 5,139,935	18.08.92	Fukuhara et al.			
	9 5,173,158	22.12.92	Schmukler			
	10 5,186,800	16.02.93	Dower			
	11 5,223,409	29.06.93	Ladner et al.			
	12 5,232,856	03.08.93	Firth			
	13 5,270,170	14.12.93	Schatz et al.			
	14 5,283,194	01.02.94	Schmukler			
	15 5,403,484	04.04.95	Ladner et al.			
	16 5,422,272	06.06.95	Papp et al.			
	17 5,427,908	27.06.95	Dower et al.			
	18 5,432,018	11.07.95	Dower et al.			
	19 5,498,530	12.03.96	Schatz et al.			
	20 5,498,538	12.03.96	Kay et al.			
	21 5,514,548	07.05.96	Krebber et al.			
	22 5,516,637	14.05.96	Huang et al.			
	23 5,534,257	09.07.96	Mastico et al.			
	24 5,552,314	03.09.96	Greener			
	25 5,565,332	15.10.96	Hoogenboom et al.			
	26 5,580,717	03.12.96	Dower et al.			
	27 5,622,699	22.04.97	Ruoslahti et al.			
	28 5,627,024	06.05.97	Maruyama et al.			
	29 5,658,727	19.08.97	Barbas et al.			
	30 5,667,988	16.09.97	Barbas et al.			
	31 5,698,426	16.12.97	Huse			
	32 5,702,892	30.12.97	Mulligan-Kehoe			
	33 5,707,841	13.01.98	Greener			
	34 5,712,089	27.01.98	Borrebaeck et al.			
	35 5,723,286	03.03.98	Dower et al.			
	36 5,723,287	03.03.98	Russell et al.			

Examiner

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2/28/03

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Sidhu et al.Filing Date  
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1627

## LIST OF DISCLOSURES CITED BY APPLICANT

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## U.S. PATENT DOCUMENTS

Examiner Initials	Document Number	Date	Name	Class	Subclass	Filing Date
mcg	37 5,723,323	03.03.98	Kauffman et al.			
	38 5,733,743	31.03.98	Johnson et al.			
	39 5,734,018	31.03.98	Rutter et al.			
	40 5,750,373	12.05.98	Garrard et al.			
	41 5,756,345	26.05.98	Camakaris et al.			
	42 5,759,817	02.06.98	Barbas			
	43 5,763,192	09.06.98	Kauffman et al.			
	44 5,770,356	23.06.98	Light, II et al.			
	45 5,770,434	23.06.98	Huse			
mcg	46 5,780,279	14.07.98	Matthews et al.			

## FOREIGN PATENT DOCUMENTS

Examiner Initials	Document Number	Date	Country	Class	Subclass	Translation Yes	Translation No
mcg	47 844,306	27.05.98	EPO				
	48 WO 92/06176	16.04.92	PCT				
	49 WO 95/27045	12.10.95	PCT				
	50 WO 95/34648	21.12.95	PCT				
	51 WO 95/34683	21.12.95	PCT				
	52 WO 96/22393	25.07.96	PCT				
	53 WO 97/02342	23.01.97	PCT				
	54 WO 97/09436	13.03.97	PCT				
	55 WO 97/09446	13.03.97	PCT				
	56 WO 97/12048	03.04.97	PCT				
	57 WO 97/29185	14.08.97	PCT				
	58 WO 97/35196	25.09.97	PCT				
	59 WO 97/40141	30.10.97	PCT				
	60 WO 97/44491	27.11.97	PCT				
	61 WO 97/46251	11.12.97	PCT				
	62 WO 97/47314	18.12.97	PCT				
	63 WO 98/05344	12.02.98	PCT				
	64 WO 98/14277	09.04.98	PCT				
	65 WO 98/15833	16.04.98	PCT				
	66 WO 98/20036	14.05.98	PCT				
	67 WO 98/20159	14.05.98	PCT				
mcg	68 WO 98/20169	14.05.98	PCT				

Examiner

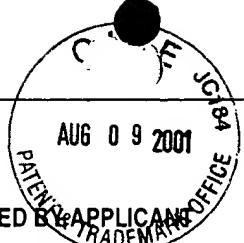
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U.S. Dept. of Commerce  
Patent and Trademark OfficeAtty Docket No.  
P1581R2Serial No.  
09/380,447Applicant  
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01 Sep 1999Group  
1627LIST OF DISCLOSURES CITED BY APPLICANT  
(Use several sheets if necessary)

#5

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)

69	Allen et al., "Finding prospective partners in the library: the two-hybrid system and phage display find a match" <u>TIBS</u> 20:511-516 (1995)
70	Barbas et al., "Assembly of Combinatorial Libraries on Phage Surfaces: The Gene III Site" <u>Proc. Natl. Acad. Sci. USA</u> 88:7978-7982 (1991)
71	Barbas et al., "Semisynthetic combinatorial antibody libraries: A chemical solution to the diversity problem" <u>Proc. Natl. Acad. Sci. USA</u> 89:4457-4461 (1992)
72	Barbas, "Recent advances in phage display" <u>Current Opinion in Biotechnology</u> 4:526-530 (1993)
73	Bass et al., "Hormone Phage: An Enrichment Method for Variant Proteins with Altered Binding Properties" <u>Proteins: Structure, Function, and Genetics</u> 8(4):309-314 (1990)
74	Bonnycastle et al., "Probing the Basis of Antibody Reactivity with a Panel of Constrained Peptide Libraries Displayed by Filamentous Phage" <u>J. Mol. Biol.</u> 258:747-762 (1996)
75	Bradbury and Cattaneo, "The use of phage display in neurobiology" <u>Trends in Neuroscience</u> 18:243-249 (1995)
76	Chappel et al., "Modulation of antibody display on M13 filamentous phage" <u>J. Immunol. Meth.</u> 221:25-34 (1998)
77	Choo and Klug, "Designing DNA-binding proteins on the surface of filamentous phage" <u>Current Opinion in Biotechnology</u> 6:431-436 (1995)
78	Clackson and Wells, "In vitro selection from protein and peptide libraries" <u>Trends Biotechnol.</u> 12:173-184 (1994)
79	Clackson et al., "Making antibody fragments using phage display libraries" <u>Nature</u> 352:624-628 (1991)
80	Cortese et al., "Identification of biologically active peptides using random libraries displayed on phage" <u>Current Opinion in Biotechnology</u> 6:73-80 (1995)
81	Cortese et al., "Selection of biologically active peptides by phage display of random peptide libraries" <u>Current Opinion in Biotechnology</u> 7:616-621 (1996)
82	Cwirla et al., "Peptides on phage: a vast library of peptides for identifying ligands" <u>Proc. Natl. Acad. Sci. USA</u> 87(16):6378-6382 (1990)
83	de Kruif et al., "Selection and Application of Human Single Chain Fv Antibody Display Library with Designed CDR3 Regions" <u>J. Mol. Biol.</u> 248:97-105 (1995)
84	Deber et al., "Val --> Ala mutations selectively alter helix-helix packing in the transmembrane segment of phage M13 coat protein" <u>Proc. Natl. Acad. Sci. USA</u> 90:11648-11652 (1993)
85	Demartis et al., "A Strategy for the Isolation of Catalytic Activities from Repertoires of Enzymes Displayed on Phage" <u>J. Mol. Biol.</u> 286:617-633 (1999)
86	Dower et al., "High efficacy transformation of E. coli by high voltage electroporation" <u>Nucleic Acids Research</u> 16(13):6127-6145 (1988)
87	Dunn, I.S., "Phage display of proteins" <u>Current Opinion in Biotechnology</u> 7:547-553 (1996)

Examiner

Date Considered

2/26/03

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FORM PTO-1449		U.S. Dept. of Commerce Patent and Trademark Office	Atty Docket No. P1581R2	Serial No. 09/380,447
LIST OF DISCLOSURES CITED BY APPLICANT		Applicant Sidhu et al. #5		
(Use several sheets if necessary)		Filing Date 01 Sep 1999	Group 1627	

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)

<i>MCR</i>	88	Greenwood et al., "Regulation of Filamentous Bacteriophage Length by Modification of Electrostatic Interactions Between Coat Protein and DNA" <u>J. Mol. Biol.</u> 217:223-227 (1991)
	89	Griffiths et al., "Isolation of High Affinity Human Antibodies Directly From Large Synthetic Repertoires" <u>EMBO Journal</u> 13:3245-3260 (1994)
	90	Haigh and Webster, "The Major Coat Protein of Filamentous Bacteriophage f1 Specifically Pairs in the Bacterial Cytoplasmic Membrane" <u>J. Mol. Biol.</u> 279:19-29 (1998)
	91	Holmes et al., "Bacteriophage Display of Chymotrypsin Inhibitor 2" <u>Protein Pept. Lett.</u> 3:415-422 (1996)
	92	Hoogenboom and Winter, "By-passing immunisation: human antibodies from synthetic repertoires of germline VH gene segments rearranged in vitro" <u>J. Mol. Biol.</u> 227:381-388 (1992)
	93	Hoogenboom, "Designing and optimizing library selection strategies for generating high-affinity antibodies" <u>Trends in Biotechnology</u> 15(2):62-70 (Feb 1997)
	94	Hunter et al., "Interactions between DNA and coat protein in the structure and assembly of filamentous bacteriophage fd" <u>Nature</u> 327:252-254 (1987)
	95	Janda et al., "Chemical Selection for Catalysis in Combinatorial Antibody Libraries" <u>Science</u> 275:945-948 (1997)
	96	Janda et al., "Direct selection for a catalytic mechanism from combinatorial antibody libraries" <u>Proc. Natl. Acad. Sci. USA</u> 91:2532-2536 (1994)
	97	Jeffries, D., "Selection of novel ligands from phage display libraries: an alternative approach to drug and vaccine discovery?" <u>Parasitology Today</u> 14(5):202-206 (1998)
	98	Jespers et al., "Surface Expression and Ligand-Based Selection of cDNAs Fused to Filamentous Phage Gene VI" <u>Biotechnology</u> 13:378-382 (1995)
	99	Kang et al., "Linkage of recognition and replication functions by assembling combinatorial antibody Fab libraries along phage surfaces" <u>Proc. Natl. Acad. Sci. USA</u> 88:4363-4366 (1991)
	100	Li et al., "Filamentous Bacteriophage Display of a Bifunctional Protein A::scFv Fusion" <u>Mol. Biotech.</u> 9:187-193 (1998)
	101	Lindqvist and Naderi, "Peptide presentation by bacteriophage P4" <u>FEMS Microbiology Reviews</u> 17:33-39 (1995)
	102	Lowman and Wells, "Monovalent Phage Display: A Method for Selecting Variant Proteins from Random Libraries" <u>Methods: Comp. to Methods Enzymol.</u> 3:205-216 (1991)
	103	Lowman et al., "Molecular mimics of insulin-like growth factor 1 (IGF-1) for inhibiting IGF-1: IGF-binding protein interactions" <u>Biochemistry</u> 37(25):8870-8878 (1998)
	104	Lowman et al., "Selecting High-Affinity Binding Proteins by Monovalent Phage Display" <u>Biochemistry</u> 30(45):10832-10838 (1991)
	105	Makowski, L., "Structural constraints on the display of foreign peptides on filamentous bacteriophages" <u>Gene</u> 128:5-11 (1995)
<i>V</i>	106	Malik et al., "Role of Capsid Structure and Membrane Protein Processing in Determining the Size and Copy Number of Peptides Displayed on the Major Coat Protein of Filamentous Bacteriophage" <u>J. Mol. Biol.</u> 260:9-21 (1996)
<i>MCR</i>	107	Marks et al., "By-passing immunization: human antibodies from V-gene libraries displayed on phage" <u>J. Mol. Biol.</u> 222:581-597 (1991)

Examiner

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Date Considered

*2/26/03*

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)

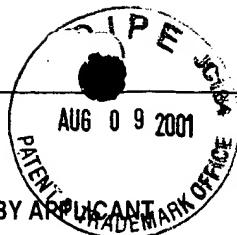
<i>MS</i>	108	Marvin, D.A., "Filamentous phage structure, infection and assembly" <u>Current Opinions in Structural Biology</u> 8:150-158 (1998)
	109	Matthews et al., "Substrate phage: selection of protease substrates by monovalent phage display" <u>Science</u> 260:1113-1117 (1993)
	110	McGregor, "Selection of proteins and peptides from libraries displayed on filamentous bacteriophage" <u>Molecular Biotechnology</u> 6:155-162 (1996)
	111	McLafferty et al., "M13 bacteriophage displaying disulfide-constrained microproteins" <u>Gene</u> 128:29-36 (1993)
	112	Michael et al., "In vitro and in vivo characterisation of a recombinant carboxypeptidase G <sub>2</sub> ::anti-CEA scFv fusion protein" <u>Immunotechnology</u> 2:47-57 (1996)
	113	Neri et al., "Engineering recombinant antibodies for immunotherapy" <u>Cell Biophysics</u> 27(1):47-61 (Aug 1995)
	114	O'Boyle et al., "Identification of a novel peptide substrate of HSV-1 protease using substrate phage display" <u>Virology</u> 236:338-347 (1997)
	115	O'Neil and Hoess, "Phage display: protein engineering by directed evolution" <u>Current Opinion in Structural Biology</u> 5:443-449 (1995)
	116	Pedersen et al., "A method for directed evolution and functional cloning of enzymes" <u>Proc. Natl. Acad. Sci. USA</u> 95:10523-10528 (1998)
	117	Scott and Smith, "Searching for peptide ligands with an epitope library" <u>Science</u> 249:386-390 (1990)
	118	Smith, "Filamentous fusion phage: novel expression vectors that display cloned antigens on the virion surface" <u>Science</u> 228(4705):1315-1317 (1985)
	119	Smith, G. P., "Surface presentation of protein epitopes using bacteriophage expression systems" <u>Curr. Opin. Biotechnol.</u> 2(5):668-673 (1991)
	120	Soderlind et al., "Phage display technology in antibody engineering: design of phagemid vectors and in vitro maturation systems" <u>Immunological Reviews</u> 130:109-124 (Dec 1992)
	121	Soumillion et al., "Phage display of enzymes and in vitro selection for catalytic activity" <u>Applied Biochemistry and Biotechnology</u> 47:175-190 (1994)
	122	Spruijt et al., "Accessibility and Environment Probing Cysteine Residues Introduced along the Putative Transmembrane Domain of the Major Coat Protein Bacteriophage M13" <u>Biochemistry</u> 35:10383-10391 (1996)
	123	Symmons et al., "Matching Electrostatic Charge between DNA and Coat Protein in Filamentous Bacteriophage. Fibre Diffraction of Charge-deletion Mutants" <u>J. Mol. Biol.</u> 245:86-91 (1995)
	124	Vaughan et al., "Human Antibodies With Sub-nanomolar Affinities Isolated From a Large Non-immunized Phage Display Library" <u>Nature Biotechnology</u> 14:309-314 (1996)
	125	Wells and Lowman, "Rapid evolution of peptide and protein binding properties in vitro" <u>Curr. Opin. Biotechnol.</u> 3:355-362 (1992)
✓	126	Williams et al., "Packing of Coat Protein Amphipathic and Transmembrane Helices in Filamentous Bacteriophage M13: Role of Small Residues in Protein Oligomerization" <u>J. Mol. Biol.</u> 252:6-14 (1995)
<i>MS</i>	127	Winter et al., "Making antibodies by phage display technology" <u>Annual Review of Immunology</u> 12:433-455 (1994)

Examiner

Date Considered

2/26/03

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Sheet 6 of 6

FORM PTO-1449

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Atty Docket No.  
P1581R2

Serial No.  
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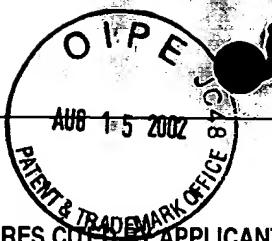
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**Atty Docket No.**

P1581R2

Sheet 1 of

Serial No.

09/380,447

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Atty Docket No. P1581R2	Serial No. 09/380,447 <i>#16</i>
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## **FOREIGN PATENT DOCUMENTS**

Examiner Initials		Document Number	Date	Country	Class	Subclass	Translation Yes      No
<i>mas</i>		129 WO 00/09715	24.02.00	PCT			
		130 WO 92/09690	11.06.92	PCT			
		131 WO 92/14829	03.09.92	PCT			
		132 WO 94/11496	26.05.94	PCT			
		133 WO 98/53100	26.11.98	PCT			
<i>mas</i>		134 WO 99/58655	18.11.99	WO			

**OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)**

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